

(e) Mark the product in accordance with part 45 of this chapter, including any critical parts;

(f) Identify any portion of that product (*e.g.*, sub-assemblies, component parts, or replacement articles) that leave the manufacturer's facility as FAA approved with the manufacturer's part number and name, trademark, symbol, or other FAA-approved manufacturer's identification; and

(g) Except as otherwise authorized by the FAA, obtain a production certificate for that product in accordance with subpart G of this part within 6 months after the date of issuance of the type certificate.

[Doc. No. FAA-2006-25877, Amdt. 21-92, 74 FR 53387, Oct. 16, 2009]

§ 21.125 [Reserved]

§ 21.127 Tests: aircraft.

(a) Each person manufacturing aircraft under a type certificate must establish an approved production flight test procedure and flight check-off form, and in accordance with that form, flight test each aircraft produced.

(b) Each production flight test procedure must include the following:

(1) An operational check of the trim, controllability, or other flight characteristics to establish that the production aircraft has the same range and degree of control as the prototype aircraft.

(2) An operational check of each part or system operated by the crew while in flight to establish that, during flight, instrument readings are within normal range.

(3) A determination that all instruments are properly marked, and that all placards and required flight manuals are installed after flight test.

(4) A check of the operational characteristics of the aircraft on the ground.

(5) A check on any other items peculiar to the aircraft being tested that can best be done during the ground or flight operation of the aircraft.

§ 21.128 Tests: aircraft engines.

(a) Each person manufacturing aircraft engines under a type certificate must subject each engine (except rocket engines for which the manufacturer

must establish a sampling technique) to an acceptable test run that includes the following:

(1) Break-in runs that include a determination of fuel and oil consumption and a determination of power characteristics at rated maximum continuous power or thrust and, if applicable, at rated takeoff power or thrust.

(2) At least five hours of operation at rated maximum continuous power or thrust. For engines having a rated takeoff power or thrust higher than rated maximum continuous power or thrust, the five-hour run must include 30 minutes at rated takeoff power or thrust.

(b) The test runs required by paragraph (a) of this section may be made with the engine appropriately mounted and using current types of power and thrust measuring equipment.

[Doc. No. 5085, 29 FR 14568, Oct. 24, 1964, as amended by Amdt. 21-5, 32 FR 3735, Mar. 4, 1967]

§ 21.129 Tests: propellers.

Each person manufacturing propellers under a type certificate must give each variable pitch propeller an acceptable functional test to determine if it operates properly throughout the normal range of operation.

§ 21.130 Statement of conformity.

Each holder or licensee of a type certificate who manufactures a product under this subpart must provide, in a form and manner acceptable to the FAA, a statement that the product for which the type certificate has been issued conforms to its type certificate and is in a condition for safe operation.

[Doc. No. FAA-2006-25877, Amdt. 21-92, 74 FR 53387, Oct. 16, 2009]

Subpart G—Production Certificates

SOURCE: Docket No. FAA-2006-25877, Amdt. 21-92, 74 FR 53387, Oct. 16, 2009, unless otherwise noted.

§ 21.131 Applicability.

This subpart prescribes—

(a) Procedural requirements for issuing production certificates; and

§ 21.132

(b) Rules governing holders of those certificates.

§ 21.132 Eligibility.

Any person may apply for a production certificate if that person holds, for the product concerned—

- (a) A current type certificate,
- (b) A supplemental type certificate, or
- (c) Rights to the benefits of that type certificate or supplemental type certificate under a licensing agreement.

§ 21.133 Application.

Each applicant must apply for a production certificate in a form and manner prescribed by the FAA.

§ 21.135 Organization.

(a) Each applicant for or holder of a production certificate must provide the FAA with a document—

- (1) Describing how its organization will ensure compliance with the provisions of this subpart;
- (2) Describing assigned responsibilities, delegated authorities, and the functional relationship of those responsible for quality to management and other organizational components; and
- (3) Identifying an accountable manager.

(b) The accountable manager specified in paragraph (a) of this section must be responsible within the applicant's or production approval holder's organization for, and have authority over, all production operations conducted under this part. The accountable manager must confirm that the procedures described in the quality manual required by § 21.138 are in place and that the production approval holder satisfies the requirements of the applicable regulations of subchapter C, Aircraft. The accountable manager must serve as the primary contact with the FAA.

[Doc. No. FAA-2013-0933, Amdt. 21-98, 80 FR 59031, Oct. 1, 2015]

§ 21.137 Quality system.

Each applicant for or holder of a production certificate must establish and describe in writing a quality system that ensures that each product and article conforms to its approved design

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and is in a condition for safe operation. This quality system must include:

(a) *Design data control.* Procedures for controlling design data and subsequent changes to ensure that only current, correct, and approved data is used.

(b) *Document control.* Procedures for controlling quality system documents and data and subsequent changes to ensure that only current, correct, and approved documents and data are used.

(c) *Supplier control.* Procedures that—

(1) Ensure that each supplier-provided product, article, or service conforms to the production approval holder's requirements; and

(2) Establish a supplier-reporting process for products, articles, or services that have been released from or provided by the supplier and subsequently found not to conform to the production approval holder's requirements.

(d) *Manufacturing process control.* Procedures for controlling manufacturing processes to ensure that each product and article conforms to its approved design.

(e) *Inspecting and testing.* Procedures for inspections and tests used to ensure that each product and article conforms to its approved design. These procedures must include the following, as applicable:

(1) A flight test of each aircraft produced unless that aircraft will be exported as an unassembled aircraft.

(2) A functional test of each aircraft engine and each propeller produced.

(f) *Inspection, measuring, and test equipment control.* Procedures to ensure calibration and control of all inspection, measuring, and test equipment used in determining conformity of each product and article to its approved design. Each calibration standard must be traceable to a standard acceptable to the FAA.

(g) *Inspection and test status.* Procedures for documenting the inspection and test status of products and articles supplied or manufactured to the approved design.

(h) *Nonconforming product and article control.* (1) Procedures to ensure that only products or articles that conform to their approved design are installed on a type-certificated product. These